

REMARKS

Claims 1-5 are pending in the present application.

Rejections under 35 USC §112

Claims 1-5 have been rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. It is asserted in the Office Action that one of ordinary skill would not be able to ascertain all types of structures occurring in the oligomerization reaction without undue experimentation. Applicants respectfully traverse this rejection.

Claim 1 has been amended and the language "based on the entirety of types of structure formed by isocyanate oligomerization" removed to clarify the intended meaning of the claim. The amount of uretdione group content, as explained on page 12 of the specification, lines 4-14, is based on NMR spectroscopy measurements. Unless otherwise specified it refers to the sum of the types of structures formed by the modification reaction (oligomerization) from the hitherto free NCO groups of the isocyanate being modified. Applicants respectfully submit that the above method of measuring the content of uretdione groups is standard and well known in the art, and that one skilled in the art can readily make this determination without undue experimentation, based on the information provided in the specification and the level of skill in the art. Applicants respectfully submit that Claim 1, and the claims depending therefrom, are sufficiently enabled and request withdrawal of the enablement rejection.

Claims 1-5 have also been rejected under 35 U.S.C. §112, second paragraph, as indefinite and failing to comply with the written description requirement. Applicants respectfully traverse this rejection and submit that Claim 1, as amended, is not indefinite. As noted above, one skilled in the art can easily determine the molar fraction of uretdione groups in an oligomer, using NMR spectroscopy methods as outlined in the specification and which are well known in the art. Claim 1 clearly indicates that the polyisocyanates have a molar fraction of uretdione groups of greater than 50%. Applicants respectfully submit that all requirements of §112 are met and request withdrawal of the §112 rejections.

Rejections under 35 USC §102(b)

Claims 1-5 are rejected under 35 U.S.C. §102(b) as anticipated by Laas, et al., U.S. 6,444,778. Applicants respectfully traverse this rejection as it may pertain to the amended claims.

Claim 1 relates to polyisocyanates having greater than 50 mol% uretdione groups with a residual monomer content below 0.3% by weight and which does not exceed 0.5% by weight after six-month storage at 50°C. Laas does not disclose the mol% of the uretdione groups formed therein, and it cannot be assumed that the molar percentage claimed in the present invention is inherent in the polyisocyanates of Laas, since Laas uses a different method, using urea and/or amide stabilizers, which are described as "fundamental" to that invention (col. 7, lines 50-51). Additionally, Laas does not disclose the residual monomer content at six months. The longest period for which Laas presents information is 35 days.

In order to find a rejection under §102 every claim element must be present in the cited reference. That is clearly not the case in the present situation, as not all claim elements are shown in Laas. Applicants respectfully submit that Claim 1 is not anticipated by Laas.

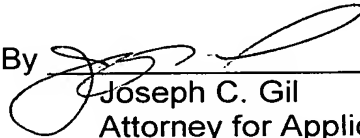
Claims 2-5 are also not anticipated by Laas. In the process of the present invention, it is not necessary to use urea and/or amide stabilizers, as required by Laas. As amended, the process of Claim 2 excludes the addition of other ingredients that would materially affect the basic and novel characteristics of the invention, such as the use of the urea/amide stabilizers. Applicants respectfully submit that Claims 1-5 are not anticipated by Laas and request withdrawal of this basis of rejection.

CONCLUSION

As all outstanding issues have been addressed, Applicants submit that Claims 1-5 are in condition for allowance; such action is respectfully requested at an early date.

Respectfully submitted,

By



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